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PHOTOGRAPHIC INTELLIGENCE REPORT

RADAR CALIBRATION FACILITIES AND NEWLY IDENTIFIED ELECTRONIC EQUIPMENT, GORKIY RADAR ASSEMBLY AND TEST AREA, USSR

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CIA/PIR 71015

DATE Oct 1966

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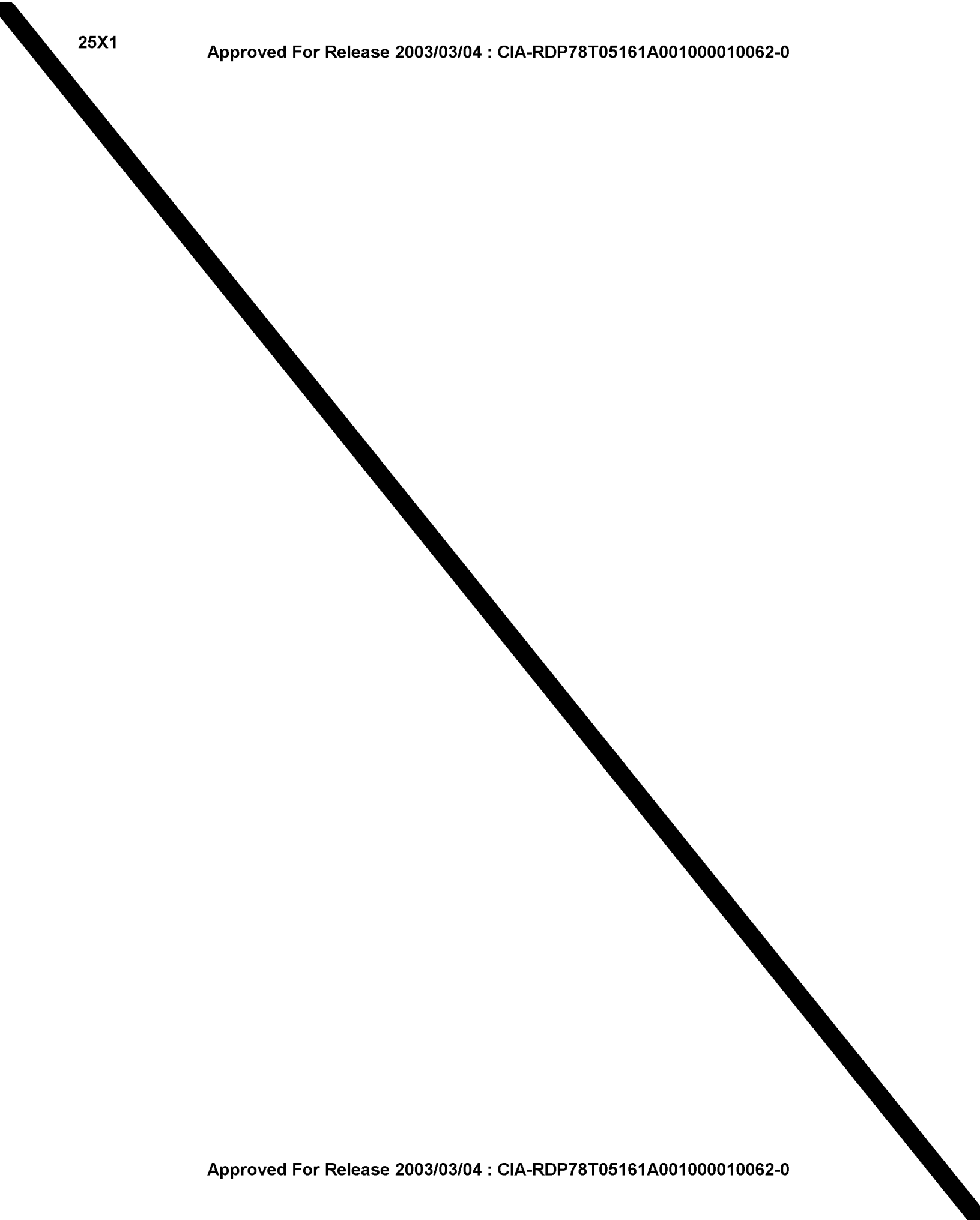

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RADAR CALIBRATION FACILITIES AND NEWLY IDENTIFIED ELECTRONIC EQUIPMENT, GORKIY RADAR ASSEMBLY AND TEST AREA, USSR

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FIGURE 1

CIA/PIR-71015

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RADAR CALIBRATION FACILITIES AND NEWLY IDENTIFIED ELECTRONIC EQUIPMENT, GORKIY RADAR ASSEMBLY AND TEST AREA, USSR

General Information

This report is in response to a request for comparative analysis of radar calibration facilities at the Radar Assembly and Test Area, Gorkiy/Sormovo Airfield, USSR (56-19N 43-47E) and at the Pentagon Electronics Site, Leningrad Northwest Probable Long Range SAM Launch Complex, USSR (60-27N 29-44E) (Figure 1). Additional information relating to the activities conducted at Gorkiy/Sormovo Radar Assembly and Test Area was discovered during this analysis and has been included in the report. This information indicates the scope of activities at the radar assembly and test area to be greater than previously estimated.

Radar Calibration Towers

Analysis of the radar calibration tower at both installations revealed no similarity in size or design. The probable calibration tower at the Gorkiy facility is approximately [redacted] with a structure of undetermined shape at the top (Figure 2). The size of this structure cannot be determined accurately, although it is considerably larger than the thickness of the tower. The possible calibration tower at the Leningrad Northwest Probable Long Range SAM Launch Complex (Figure 4) appears as a thin, 95-foot high mast with no structure of any type at the top. 25X1

Gorkiy/Sormovo Radar Assembly and Test Area

First observed in [redacted] the Radar Assembly and Test Area at Gorkiy/Sormovo Airfield consists of an assembly/checkout area, a support area, and the [redacted] high probable calibration tower. 25X1 25X1

Assembly/Checkout Area

Within the assembly/checkout area is a 580 by 60 foot hard surfaced assembly line, an associated control building, a smaller support structure,

and several unidentified objects north of the assembly line. Spaced at regular intervals on the assembly line, in various stages of assembly, are five radars of the type seen at the probable long range SAM launch complexes. Three of the radars appear to be basically complete. At the north end of the assembly line is a large gantry crane which has not been seen in operation on [redacted] photography, although radar construction progress has been evident. On the southernmost radar on the assembly line, as seen on [redacted] a ring or ring-like structure, approximately [redacted] in diameter, is partially visible beneath the antenna under construction. While the configuration of the van or supporting unit upon which this ring is mounted is not discernible, it is possible that the individual radar antenna assemblies here on the assembly line, are positioned on permanent mounts, as opposed to the actual vans or support units upon which they would be mounted in their field operational role.

X1 25X1 25X1

Support Area

Two permanent structures are present within the support area east of the assembly/checkout line (Figures 2 and 3). The larger of the two is a 95 by 35 foot shed-type storage building, around which the majority of activity in the support area is centered. The smaller building is a 60 by 40 foot gable roof structure with large doors in the western end. [redacted] a 35-foot, flat roof extension was added to the eastern end.

X1

Two, and probably three FAN SONG radars were identified here during a detailed analysis of the numerous objects adjacent to the probable storage building. The presence of these radars was indicated on all photography since the original construction of the Gorkiy facility. The radars are located adjacent to the south side of the road connecting the support area and the assembly line. Two of the radars are located at the western end of the probable storage building, and the third FAN SONG radar is located about halfway between the building and the assembly line. Collocated with each FAN SONG radar are two elongated, probable electronics vans, and a smaller possible generator van. The easternmost radar has a fourth associated possible van. [redacted] photography of [redacted] 25X1
[redacted] provided the best view of the FAN SONG radars. They can also be seen on later missions in various stages of assembly and disassembly, with a construction crane visible at the FAN SONG adjacent to the probable storage building.

X1
X1

In the support area, as seen on [redacted] two probable structures or support units, each approximately 20 feet square, are present to the east of the probable storage building (Figure 3). Midway between the structures is an unidentified object, possibly some type of radar. Mounted upon the roof of these structures is an approximately [redacted] diameter ring. Present within each ring is an object(s) of an unidentified configuration. 25X1 X1

Discussion

It is improbable that a design or functional relationship exists between the two 20-foot square structures in the support area and the support unit for the antenna assemblies on the assembly line. Whereas the ring structures which are visible in both places could have common basic functions, there is no evidence to suggest that a probable long range SAM type of antenna assembly will be erected upon the two structures in the support area. This reasoning results from the observations that a 20-foot square structure has never been visible beneath an antenna on the assembly line, and that the two structures which have been seen are in a separate area from the assembly line. No equipment, such as seen in conjunction with the probable long range SAM radars in the assembly area (gantry crane, antenna trailers, etc.), is present in the support area.

On the basis of this evidence it is considered that the 20-foot square structures in the support area were constructed to accomodate other types of radars, which would be assembled and checked out in the support area. The possibility of additional radar types seems likely, based on the unidentified object between the two square structures. In addition, several irregularly shaped objects, yet to be identified, are present in the vicinity. These objects do not appear similar to FAN SONG radars or to the radars on the assembly line.

Conclusion

Prior to this report, the activity at the Gorkiy Radar Assembly and Test Area was believed limited to the checkout and assembly of the probable long range SAM tracking/guidance radars. However, with the recent identification of FAN SONG radars with associated vans, and possible additional types of radars in the support area, the testing capabilities of this installation now appear greater than previously assumed. Although activity on the assembly line itself appears limited to the construction of the

probable long range SAM radars, the support area must also be taken into consideration as a possible secondary assembly area for additional types of radars.

REFERENCES

MAPS

ACIC. US Air Target Chart 0154-25HL, Series 200, 3rd edition, May 1963, Scale 1:200,000 (SECRET)

ACIC. US Air Target Chart 0103-25HL, Series 200, 3rd edition, June 1962, Scale 1:200,000 (SECRET)

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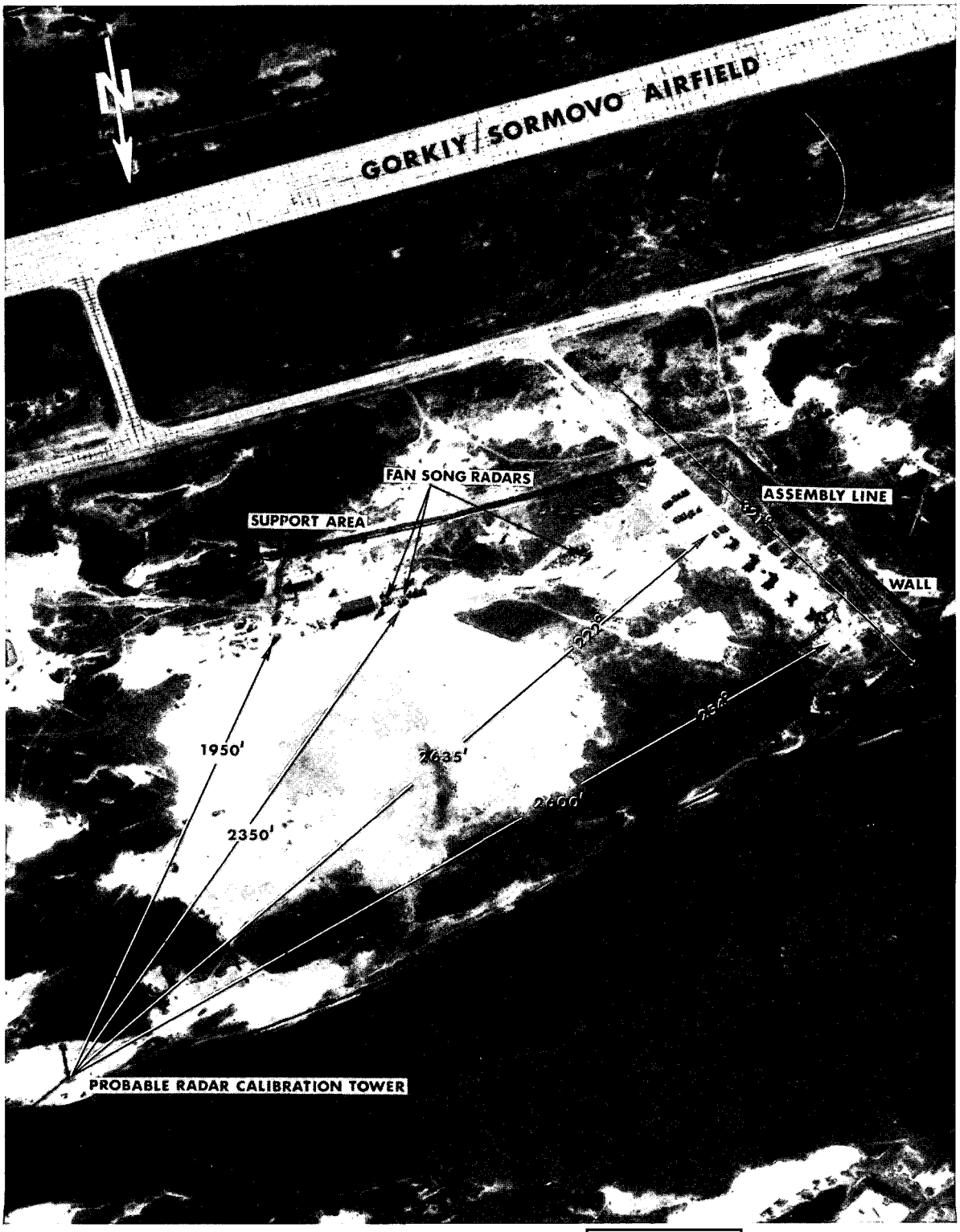
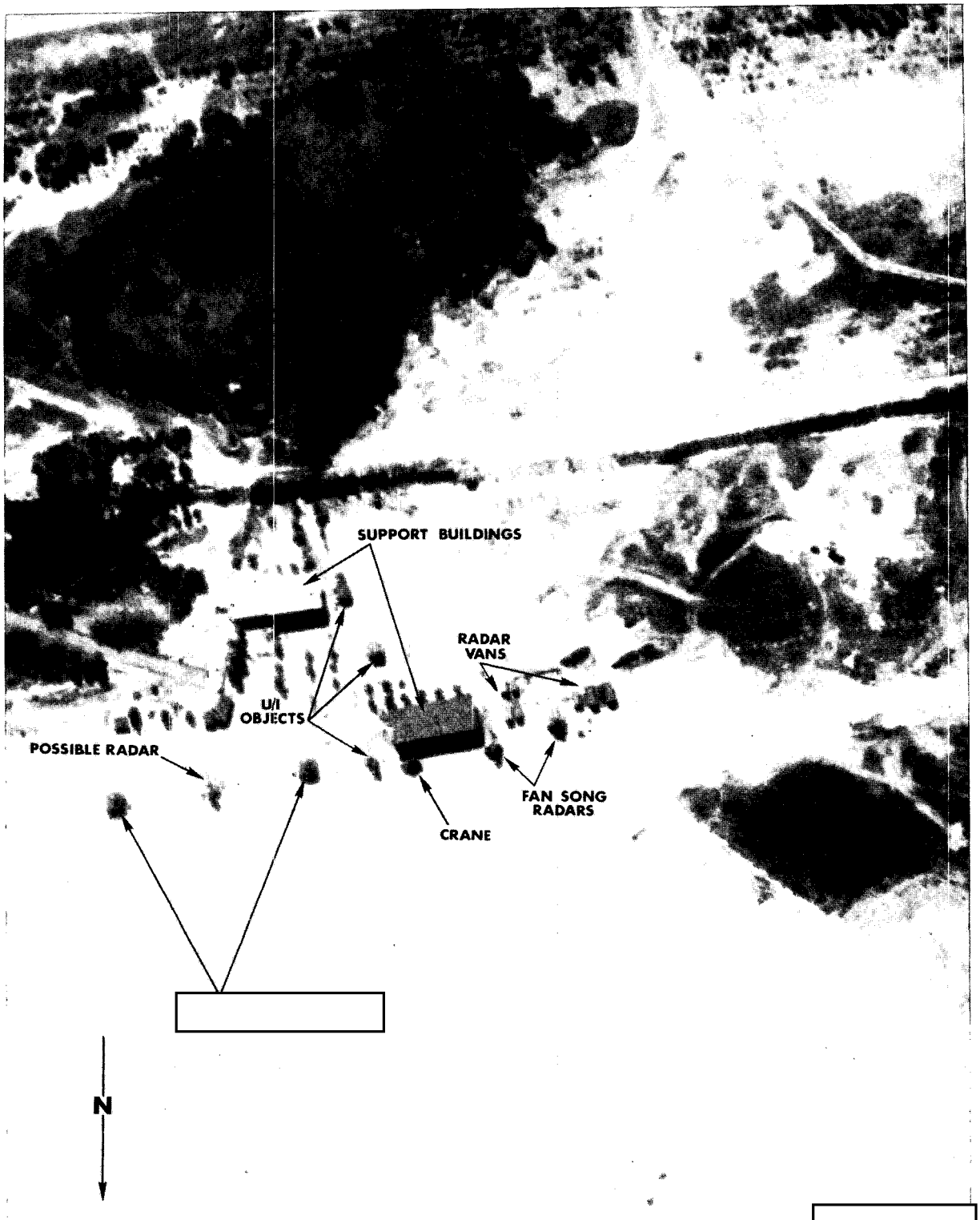


GORKIY RADAR ASSEMBLY AND TEST AREA- **FIGURE 2**



GORKIY RADAR ASSEMBLY AND TEST AREA- SUPPORT AREA **FIGURE 3**

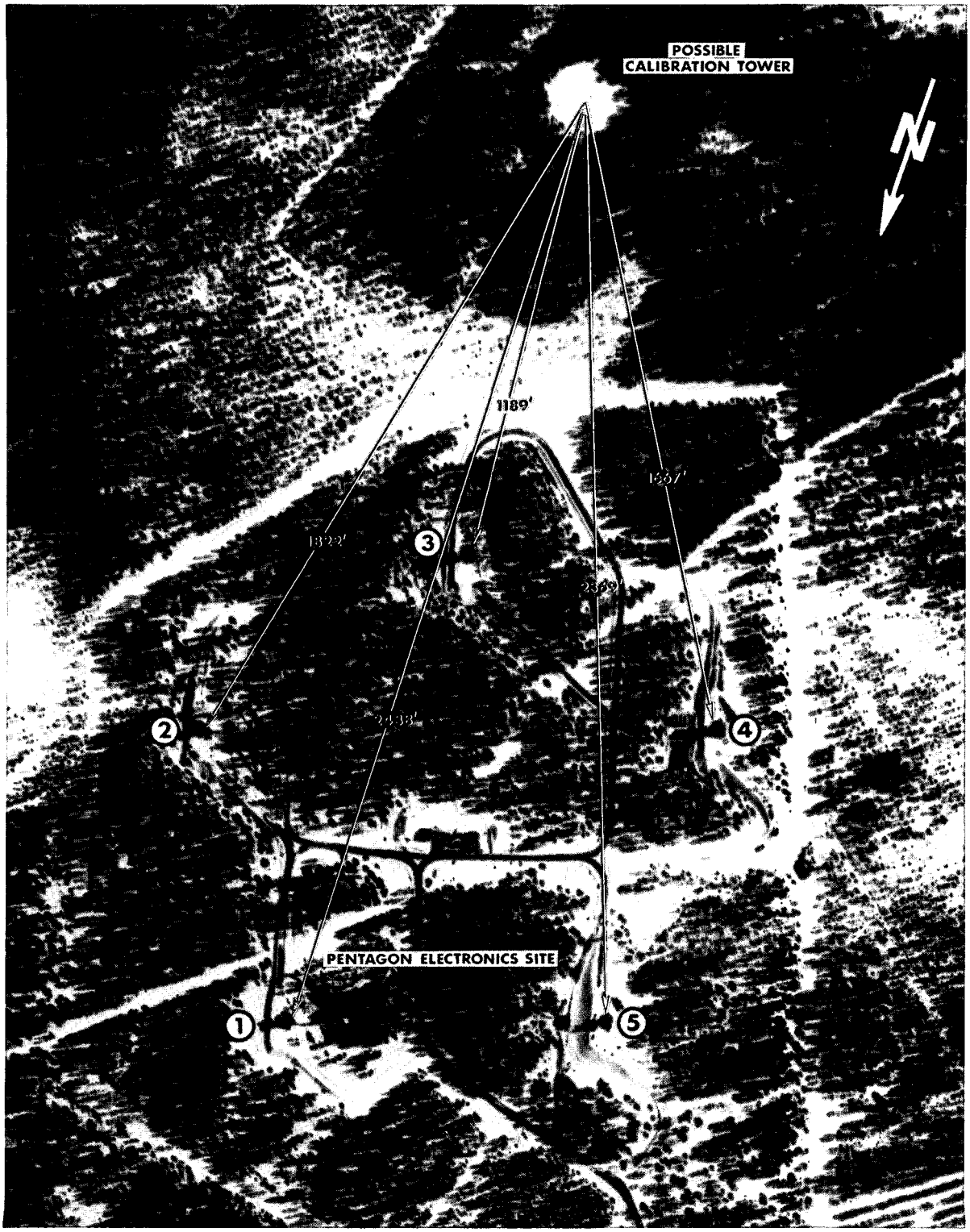


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FIGURE 4